# DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

	A13EU Revision 12			
	CESSNA			
F150G	FA150K			
F150H	F150L			
F150J	FA150L			
F150K	FRA150L			
F150M	FRA150M			
F152	FA152			
December 11, 2006				

## TYPE CERTIFICATE DATA SHEET No. A13EU

"WARNING: Use of alcohol-based fuels can cause serious performance degradation and fuel system component damage, and is therefore prohibited on Cessna airplanes."

This data sheet, which is part of Type Certificate No. A13EU prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Civil Air Regulations.

<u>Type Certificate Holder.</u> Cessna Aircraft Company

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Type Certificate A13EU was transferred from Reims Aviation S.A., 51 Aerodrome de Reims-Prunay, Reims, France, To Cessna Aircraft Company on December 11, 2006. Coincident with this transfer, the Federal Aviation Administration (FAA) has accepted the status of State of Design and State of Manufacture as defined by Annex 8 to the Convention of International Civil Aviation. Prior to December 11, 2006, products identified under Type Certificate A13EU were approved by the FAA in accordance with the Federal Aviation Regulation appropriate to Imported Products (FAR 21.29). Effective December 11, 2006, and after, these products are to be considered domestic products for the purpose of certification, and Federal Aviation Regulations 21.21 becomes appropriate.

I. Model F150G, 2 PCLM (Utility Category), Approved 22 December 1966 Model F150H, 2 PCLM (Utility Category), Approved 13 October 1967 Model F150J, 2 PCLM (Utility Category), Approved 5 September 1968 Model FA150K, 2 PCLM (Utility Category), Approved 8 January 1970

Engine Rolls Royce Continental O-200-A

Fuel \*80/87 min. grade aviation gasoline

Engine Limits \*For all operations, 2750 r.p.m. (100 hp)

Propeller and Propeller Limits 1. McCauley 1A100/MCM 21 lb (-32)

Diameter: not over 69 in., not under 67.5 in.

Static r.p.m. at maximum permissible throttle setting:

Not over 2475, not under 2375 No additional tolerance permitted

2. McCauley 1A101/DCM 21 lb (-32)

Diameter: not over 69 in., not under 67 in.

Not over 2600, not under 2500 No additional tolerance permitted

Airspeed Limits (CAS) \*Never exceed 162 mph (141 knots)

\*Maximum structural cruising

\*Maneuvering

\*Blaps extended

120 mph (104 knots)
109 mph (95 knots)
100 mph (87 knots)

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# I. Model F150G, F150H, F150J, F150K (cont'd)

C.G. Range (+32.9) to (+37.5) at 1600 lbs.

(+31.5) to (+37.5) at 1280 lbs. or less

Straight line variation between points given.

Empty Wt. C.G. Range None

Leveling Means Top surface at tailcone

Maximum Weight \*1600 lb.

No. of Seats 2 at (+39); (For child's optional jump seat, refer to Equipment List.)

Maximum Baggage 120 lb. - Reference weight and balance data

Fuel Capacity 26 gal., (22.5 gal. usable two 13 gal. tanks in wings at +42)

See NOTE 1 for system fuel and oil.

Oil Capacity 6 qt. (-13.5, unusable 2 qt.). See NOTE 1 for data on system fuel and oil.

Control Surface Movements Wing Flaps Down  $0^{\circ}$  -  $40^{\circ} \pm 2^{\circ}$ 

(measured perpendicularly to hinge line)

Serial Numbers Eligible: F150G: F150-0068 through F150-0219

F150H: F150-0220 through F150-0389 F150J: F150-0390 through F150-0529 F150K: F15000530 through F15000658

# II. Model FA150K, 2 PCLM (Acrobatic Category), Approved 8 January 1970

Engine Rolls-Royce Continental O-200-A

Fuel \*80/87 min. grade aviation gasoline

Engine Limits \*For all operations, 2750 r.p.m. (100 hp)

Propeller and Propeller Limits 1. McCauley 1A101/DCM 21 lb (-32)

Diameter: not over 69 in., not under 67 in. Static r.p.m. at maximum permissible throttle setting: Not over 2600, not under 2500

No additional tolerance permitted

Airspeed Limits (CAS) \*Never exceed 193 mph (168 knots)

\*Maximum structural cruising 140 mph (122 knots) \*Maneuvering 118 mph (103 knots) \*Flaps extended 100 mph (87 knots)

C.G. Range (+32.9) to (+37.5) at 1600 lbs.

(+31.5) to (+37.5) at 1280 lbs. or less

Straight line variation between points given.

Empty Wt. C.G. Range None

Leveling Means Top surface at tailcone

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II. Model FA150K (cont'd)

Maximum Weight \*1600 lb.

No. of Seats 2 at (+39); (For child's optional jump seat, refer to Equipment List.)

Maximum Baggage 120 lb. - Reference weight and balance data

Fuel Capacity 26 gal., (22.5 gal. usable two 13 gal. tanks in wings at +42)

See NOTE 1 for system fuel and oil.

Oil Capacity 6 qt. (-13.5, unusable 2 qt.). See NOTE 1 for data on system fuel and oil.

Control Surface Movements Wing Flaps Down 0° - 40° ± 2°

(measured perpendicularly to hinge line)

Serial Numbers Eligible: FA1500001 through FA1500081

## III. Model F150L, 2PCLM (Utility Category), Approved 17 December 1970

Engine Rolls-Royce Continental O-200-A

Fuel \*80/87 min. grade aviation gasoline

Engine Limits \*For all operations, 2750 r.p.m. (100 hp)

Propeller and Propeller Limits 1. McCauley 1A101/GCM (1971, 1972, 1973 models) 27.7 lb (-34.5)

Diameter: not over 69 in., not under 67 in. Static r.p.m. at maximum permissible throttle setting: Not over 2600, not under 2500

No additional tolerance permitted

2. McCauley 1A101/HCM (1973, 1974 models) 27.7 lb (-34.5)

Diameter: not over 69 in., not under 67 in. Static r.p.m. at maximum permissible throttle setting: Not over 2600, not under 2500

No additional tolerance permitted

3. McCauley 1A101/PCM (1974 models) 27.0 lb (-34.5)

Diameter: not over 69 in., not under 67 in. Static r.p.m. at maximum permissible throttle setting: Not over 2600, not under 2500

No additional tolerance permitted

(See Note 4 for Data on serial number eligibility)

4. McCauley 1A102/OCM (1971 through 1974 models) 27.0 lb (-34.5)

Diameter: not over 69 in., not under 67.5 in. Static r.p.m. at maximum permissible throttle setting: Not over 2560, not under 2460

No additional tolerance permitted

Airspeed Limits (CAS) \*Never exceed 162 mph (141 knots)

\*Maximum structural cruising
\*Maneuvering

\*Flaps extended

120 mph (104 knots)
109 mph (95 knots)
(87 knots)

III. Model F150L (cont'd)

C.G. Range (+32.9) to (+37.5) at 1600 lbs.

(+31.5) to (+37.5) at 1280 lbs. or less

Straight line variation between points given.

Empty Wt. C.G. Range None

Leveling Means Jig located nut plates and screws at Station +94.63 and Station 132.94 on

left side of tailcone.

Maximum Weight \*1600 lb.

No. of Seats 2 at (+39); (For child's optional jump seat, refer to Equipment List.)

Maximum Baggage 120 lb. - Reference weight and balance data

Fuel Capacity 26 gal. total, (22.5 gal. usable, two 13 gal. tanks in wings at +42.0)

See NOTE 1 for data on unusable fuel.

Oil Capacity 6 qt. (-13.5, unusable 2 qt.). See NOTE 1 for data on undrainable oil.

Control Surface Movements Wing Flaps Down  $0^{\circ}$  -  $40^{\circ} \pm 2^{\circ}$ 

(measured perpendicularly to hinge line)

Serial Numbers Eligible: F15000659 through F15001143

## V. Model FA150L, 2PCLM (Acrobatic Category), 17 December 1970

Engine Rolls-Royce Continental O-200-A

Fuel \*80/87 min. grade aviation gasoline

Engine Limits \*For all operations, 2750 r.p.m. (100 hp)

Propeller and Propeller Limits 1. McCauley 1A101/GCM (1971, 1972, 1973 models) 27.7 lb (-34.5)

Diameter: not over 69 in., not under 67 in.
Static r.p.m. at maximum permissible throttle setting: Not over 2600, not under 2500

No additional tolerance permitted

2. McCauley 1A101/HCM (1971, 1972, 1973 models) 27.7 lb (-34.5)

Diameter: not over 69 in., not under 67 in. Static r.p.m. at maximum permissible throttle setting: Not over 2600, not under 2500

No additional tolerance permitted

3. McCauley 1A102/OCM (1974 models) 27.0 lb (-34.5)

Diameter: not over 69 in., not under 67.5 in. Static r.p.m. at maximum permissible throttle setting: Not over 2560, not under 2460

No additional tolerance permitted

Airspeed Limits (CAS) \*Never exceed 193 mph (168 knots)

\*Maximum structural cruising
\*Maneuvering

\*Flaps extended

140 mph (122 knots)
118 mph (103 knots)
100 mph (87 knots)

V. Model FA150L (cont'd)

C.G. Range (+32.9) to (+37.5) at 1600 lbs.

(+31.5) to (+37.5) at 1280 lbs. or less

Empty Wt. C.G. Range None

Leveling Means Jig located nut plates and screws at Station +94.63 and Station 132.94 on

left side of tailcone.

Maximum Weight \*1600 lb.

No. of Seats 2 at (+39); (For child's optional jump seat, refer to Equipment List.)

Maximum Baggage 120 lb. - Reference weight and balance data

Fuel Capacity 26 gal. total, (22.5 gal. usable, two 13 gal. tanks in wings at +42.0)

See NOTE 1 for data on unusable fuel.

Oil Capacity 6 qt. (-13.5, unusable 2 qt.). See NOTE 1 for data on undrainable oil.

Control Surface Movements Wing Flaps Down  $0^{\circ}$  -  $40^{\circ} \pm 2^{\circ}$ 

(measured perpendicularly to hinge line)

Serial Numbers Eligible: FA1500082 through FA1500120

# VI. Model Cessna FRA150L or FA150L (When equipped with FKA150-2311 and FKA-2316), 2PCLM (Acrobatic Category), Approved 9 February 1972

Engine Rolls-Royce Continental O-240-A

Fuel \*100/130 min. grade aviation gasoline

Engine Limits \*For all operations, 2800 r.p.m. (130 hp)

Propeller and Propeller Limits 1. McCauley 1A135/BRM 24.8 lb (-34.5)

Diameter: not over 71 in., not under 70 in.

Static r.p.m. at maximum permissible throttle setting:

Not over 2500, not under 2400 No additional tolerance permitted

Airspeed Limits (CAS) \*Never exceed 193 mph (168 knots)

\*Maximum structural cruising 140 mph (122 knots)

\*Maneuvering 118 mph (103 knots)

\*Flaps extended 100 mph (87 knots)

C.G. Range (+33.0) to (+37.5) at 1650 lbs.

(+31.5) to (+37.5) at 1350 lbs. or less

Straight line variation between points given.

Empty Wt. C.G. Range None

Leveling Means Jig located nut plates and screws at Station +94.63 and Station 132.94 on

left side of tailcone.

Maximum Weight \*1650 lb.

# VI. Model Cessna FRA150L or FA150L (cont'd)

No. of Seats 2 at (+39); (For child's optional jump seat, refer to Equipment List.)

Maximum Baggage 120 lb. - Reference weight and balance data

Fuel Capacity \*26 gal. total, (22.5 gal. usable, two 13 gal. tanks in wings at +42.0)

See NOTE 1 for system fuel and oil.

Oil Capacity 6 qt. (-18, unusable 2 qt.). See NOTE 1 for data on undrainable oil.

Control Surface Movements Wing Flaps Down  $0^{\circ}$  -  $40^{\circ} \pm 2^{\circ}$ 

Ailerons  $20^{\circ} + 2^{\circ}, -0^{\circ}$ Down 14° + 2°, - 0° Elevator 25° ± 1° 15° ± Up Down Elevator Tab Down  $20^{\circ} \pm 1^{\circ}$ Up  $10^{\circ} \pm 1^{\circ}$ Left  $23^{\circ} + 0^{\circ}$ ,  $-2^{\circ}$ Rudder Right  $23^{\circ} + 0^{\circ}$ ,  $-2^{\circ}$ 

(measured perpendicularly to hinge line)

Serial Numbers Eligible: FRA1500121 through FRA1500261

FA1500121 through FA1500261 (When equipped with FKA150-2311 and FKA-2316)

## VII. Model F150M, 2PCLM (Utility Category), Approved November 21, 1974

Engine Continental O-200-A

Fuel \*80/87 min. grade aviation gasoline

Engine Limits \*For all operations, 2750 r.p.m. (100 hp)

Propeller and Propeller Limits 1. McCauley 1A102/OCM 27.7 lb (-34.5)

Diameter: not over 69 in., not under 67.5 in. Static r.p.m. at maximum permissible throttle setting:

Not over 2560, not under 2460 No additional tolerance permitted

Airspeed Limits (CAS) F150M (1975 Model)

\*Never exceed 162 mph (141 knots)
\*Maximum structural cruising 120 mph (104 knots)
\*Maneuvering 109 mph (95 knots)
\*Flaps extended 100 mph (87 knots)

Airspeed Limits (IAS) F150M (1976 Model and on)

(See NOTE 3 on use of IAS) \*Never exceed 141 knots

\*Maximum structural cruising
\*Maneuvering

\*Flaps extended

107 knots
97 knots
85 knots

C.G. Range (+32.9) to (+37.5) at 1600 lbs.

(+31.5) to (+37.5) at 1280 lbs. or less

Straight line variation between points given.

Empty Wt. C.G. Range None

Leveling Means Jig located nut plates and screws at Station +94.63 and Station 132.94 on

left side of tailcone.

Maximum Weight \*1600 lb.

No. of Seats 2 at (+39); (For child's optional jump seat, refer to Equipment List.)

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VII. Model F150M, (cont'd)

Maximum Baggage 120 lb. - Reference weight and balance data

Fuel Capacity 26 gal. total, (22.5 gal. usable, two 13 gal. tanks in wings at +42.0)

See NOTE 1 for system fuel and oil.

Oil Capacity 6 qt. (-13.5 unusable 2 qt.). See NOTE 1 for data on undrainable oil.

Control Surface Movements Wing Flaps Down  $0^{\circ} - 40^{\circ} \pm 2^{\circ}$ 

(measured perpendicularly to hinge line)

Serial Numbers Eligible: F15001144 through F15001428

# VIII. Model FRA150M or FA150M (when equipped with FKA150-2311 and FKA150-2316) 2PCLM (Acrobatic Category), Approved November 21, 1974

Engine Rolls Royce O-240-A or O-240-E (S/N FA00262 and up)

Fuel \*100/130 min. grade aviation gasoline

Engine Limits \*(O-240-A) For all operations, 2800 r.p.m. (130 hp)

\*(O-240-E) - Takeoff (5 min.) 2800 r.p.m. (130 hp) For all other operations 2650 r.p.m. (123 hp)

Propeller and Propeller Limits 1. McCauley 1A135/BRM 24.8 lb (-34.5)

Diameter: not over 71 in., not under 70 in. Static r.p.m. at maximum permissible throttle setting:

Not over 2500, not under 2400 No additional tolerance permitted

Airspeed Limits (CAS) FRA150M (1975 Model)

\*Never exceed 193 mph (168 knots)
\*Maximum structural cruising 140 mph (122 knots)
\*Maneuvering 118 mph (103 knots)
\*Flaps extended 100 mph (87 knots)

Airspeed Limits (IAS) FRA150M (1976 Model and up)

(See NOTE 3 on use of IAS) \*Never exceed 164 knots

\*Maximum structural cruising 123 knots \*Maneuvering 105 knots \*Flaps extended 85 knots

C.G. Range (+32.9) to (+37.5) at 1650 lbs.

(+31.5) to (+37.5) at 1350 lbs. or less

Empty Wt. C.G. Range None

Leveling Means Jig located nut plates and screws at Station +94.63 and Station 132.94 on

left side of tailcone.

Maximum Weight \*1600 lb.

No. of Seats 2 at (+39); (For child's optional jump seat, refer to Equipment List.)

Maximum Baggage 120 lb. - Reference weight and balance data

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# VII. Model F150M or FA150M, (cont'd)

Fuel Capacity 26 gal. (22.5 gal. usable, two 13 gal. tanks in wings at +142.0)

See NOTE 1 for data on unusable oil.

Oil Capacity 6 qt. (-13.5 unusable 2 qt.). See NOTE 1 for data on undrainable oil.

Control Surface Movements Wing Flaps Down  $0^{\circ}$  -  $40^{\circ} \pm 2^{\circ}$ 

Ailerons Up  $20^{\circ} + 2^{\circ}, -0^{\circ}$ Down  $14^{\circ} + 2^{\circ}, -0^{\circ}$ Elevator 15° ± 1° Up  $25^{\circ} + 1^{\circ}, -0^{\circ}$ Down Up  $10^{\circ} + 1^{\circ}, -0^{\circ}$ 20° + 1° - 0° Elevator Tab Down Right  $23^{\circ} + 0^{\circ}$ ,  $-2^{\circ}$ Left  $23^{\circ} + 0^{\circ}, -2^{\circ}$ Rudder

(measured perpendicularly to hinge line)

Serial Numbers Eligible: FRA1500262 through FRA1500336

FA1500262 through FA1500336 (when equipped with FKA150-2311 and FKA150-

2316)

## IX. Model F152, 2PCLM (Utility Category), Approved June 24, 1977

Engine Lycoming O-235-L2C (1978 through 1982 model)

Lycoming O-235-N2C (1983 model and on and aircraft reworked per SK152-15 or

SK152-16)

Fuel \*100LL/100 min. grade aviation gasoline

Engine Limits \*For all operations, 2550 r.p.m. (110 hp) (1978 through 1982 model)

\*For all operations, 2550 r.p.m. (108 hp) (1983 model and on)

Propeller and Propeller Limits 1. (a) McCauley 1A103/TCM6958 23.2 lb (-36.5)

Diameter: not over 69 in., not under 67.5 in. Static r.p.m. at full throttle (carburetor heat off and mixture leaned to maximum r.p.m. is 2280 to 2380 r.p.m.

No additional tolerance permitted (b) Spinner: Dwg. 0450073

Airspeed Limits (IAS) \*Never exceed 149 knots (See NOTE 3 on use of IAS) \*Maximum structural cruising 111 knots

\*Maneuvering 104 knots \*Flaps extended 85 knots

C.G. Range (+32.65) to (+36.5) at 1670 lbs.

(+31.0) to (+36.5) at 1350 lbs. or less Straight line variation between points given.

Empty Wt. C.G. Range None

Leveling Means Jig located nut plates and screws at Station +94.63 and Station 132.9 on

left side of tailcone.

Maximum Weight \*1670 lb.

\*1675 lb. ramp weight (1979 model and on)

No. of Seats 2 at (+39); (For child's optional jump seat, refer to Equipment List.)

Maximum Baggage 120 lb. - Reference weight and balance data

Fuel Capacity 26 gal. total, (24.5 gal. usable, two 13 gal. tanks in wings at +42.0)

See NOTE 1 for data on unusable oil.

Oil Capacity 6 qt. (-14.7 unusable 2 qt.). See NOTE 1 for data on undrainable oil.

Control Surface Movements Wing Flaps Down  $0^{\circ} - 30^{\circ} \pm 2^{\circ}$ 

Ailerons Up  $20^{\circ} \pm 1^{\circ}$  Down  $15^{\circ} + 1^{\circ}$ 

(aileron travel measured from  $1^{\circ} \pm 5^{\circ}$  droop)

Elevator Up  $25^{\circ} \pm 1^{\circ}$  Down  $18^{\circ} \pm 1^{\circ}$  Elevator Tab Up  $10^{\circ} \pm 1^{\circ}$  Down  $20^{\circ} \pm 1^{\circ}$  Rudder Right  $23^{\circ} + 0^{\circ}, -2^{\circ}$  Left  $23^{\circ} + 0^{\circ}, -2^{\circ}$ 

(measured perpendicularly to hinge line)

Serial Numbers Eligible: F15201429 through F15201980

# X. Model FA152, 2PCLM (Acrobatic Category), Approved June 24, 1977

Engine Lycoming O-235-L2C (1978 through 1982 model)

Lycoming O-235-N2C (1983 model and on and aircraft reworked per SK152-15 or

SK152-16)

Fuel \*100LL/100 min. grade aviation gasoline

Engine Limits \*For all operations, 2550 r.p.m. (110 hp) (1978 through 1982 model)

\*For all operations, 2550 r.p.m. (108 hp) (1983 model and on)

Propeller and Propeller Limits 1. (a) McCauley 1A103/TCM6958 23.2 lb (-36.5)

Diameter: not over 69 in., not under 67.5 in. Static r.p.m. at full throttle (carburetor heat off and mixture leaned to maximum r.p.m.) is 2280 to 2380 r.p.m. For allowable variations in static r.p.m. at non-standard

temperatures, refer to the Service manual.

Propeller and Propeller Limits

(cont'd)

(b) Spinner: Dwg. 0450073

Airspeed Limits (IAS) \*Never exceed 172 knots (See NOTE 3 on use of IAS) \*Maximum structural cruising 125 knots

\*Maneuvering 108 knots \*Flaps extended 85 knots

C.G. Range (+32.65) to (+36.5) at 1670 lbs.

(+31.0) to (+36.5) at 1350 lbs. or less

Empty Wt. C.G. Range None

Leveling Means Jig located nut plates and screws at Station +94.63 and Station 132.94 on

left side of tailcone.

Maximum Weight \*1670 lb.

\*1675 lb. ramp weight (1979 model and on)

No. of Seats 2 at (+39); (For child's optional jump seat, refer to Equipment List.)

Maximum Baggage 120 lb. - Reference weight and balance data

Fuel Capacity 26 gal. total, (24.5 gal. usable, two 13 gal. tanks in wings at +42.0)

See NOTE 1 for data on unusable oil.

Oil Capacity 6 qt. (-14.7 unusable 2 qt.). See NOTE 1 for data on undrainable oil.

Control Surface Movements Wing Flaps  $0^{\circ} - 30^{\circ} \pm 2^{\circ}$ Down

> Ailerons Up  $20^{\circ} \pm 1^{\circ}$ Down 15° ± 1°

(aileron travel measured from  $1^{\circ} \pm 5^{\circ}$  droop)

Elevator Up  $25^{\circ} \pm 1^{\circ}$ 18° ± 1° Down Elevator Tab Up  $10^{\circ} \pm 1^{\circ}$ Down  $20^{\circ} \pm 1^{\circ}$ Rudder Right  $23^{\circ} + 0^{\circ}$ ,  $-2^{\circ}$ Left  $23^{\circ} + 0^{\circ} \cdot - 2^{\circ}$ 

(measured perpendicularly to hinge line)

Serial Numbers Eligible: FA1520337 through FA1520425

## DATA PERTINENT TO ALL MODELS

Datum Fuselage station 0.0 (front face of firewall)

Certification Basis Part 3 of the Civil Air Regulations dated May 15, 1956, as amended by 3-4.

F152/FA152 comply with FAR 36 dated December 1, 1969 plus

Amendments 36-1 through 36-5.

Date of Application for Type Certificate: 27 September 1966. Type Certificate No. A13EU issued 22 September 1966.

**Equivalent Safety Items** Airspeed indicator CAR 3.757 (See NOTE 3)

> **Operating Limitations** CAR 3.778 (a)

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations

(see Certification Basis) must be installed in the aircraft for certification. In addition

the following item of equipment is required:

Stall warning indicator, Audible, Cessna Dwg. 0413029.

NOTE 1. Current weight and balance report together with list of equipment included in certificated empty weight, and loading instructions when necessary, must be provided for each

aircraft at the time of original certification.

FRA150M (1976 Model): Model F150G through F150M (1976 Model), FA150K, FA150L, FRA150L and

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 21 lb. at +40 and undrainable oil of (0) lb at -13.5.

Model F150M (1977 Model) and FRA150M (1977 Model):

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 21 lb. at (+40) and full oil of 11.3 lb at (-13.5) for landplane.

Model F152, FA152:

The certificated empty weight and corresponding center of gravity locations must include unusable fuel of 9 lb. at (+40) and full oil of 11.3 lb. at (-14.7) for landplane.

The following information must be displayed in the form of composite or individual placards.

A. In full view of the pilot:

(1) "This airplane must be operated in compliance with the operating limitations stated in the form of placards, markings and manuals".

NOTE 2.

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# (2) Model F150G, F150H, F150J and F150K:

"Acrobatic maneuvers are limited to the following:

ManeuverEntry SpeedChandelle109 m.p.h.(95 knots)Steep Turns109 m.p.h.(95 knots)Lazy Eights109 m.p.h.(95 knots)Stalls (except whip)Use Slow DecelerationSpinsUse Slow Deceleration

Intentional spins with flaps extended prohibited. Spin recovery - opposite rudder - forward elevator

Maximum design weight 1600 lb.

Maximum maneuvering speed 109 m.p.h. (95 knots)

Maximum flight maneuvering load factors

Flaps up +4.4 -1.76 Flaps down +3.5°

#### (3) Model FA150K

"This airplane must be operated as an Acrobatic Category airplane in compliance with the operating limitations stated in the form of placards, markings and manuals.

# ACROBATIC CATEGORY

Maximum design weight 1600 lb

Maximum maneuvering speed 118 m.p.h. (103 knots)

Refer to weight and balance data for landing instructions

Flight maneuvering load factors

Flaps up +6.0 -3.0Flaps down  $+3.5^{\circ}$ 

Acrobatic maneuvers with flaps extended are prohibited.

Inverted flight is prohibited.

Child's seat and/or baggage compartment must not be occupied during acrobatic maneuvering.

Spin recovery: apply opposite rudder, followed by forward elevator for normal recovery.

## THE FOLLOWING ACROBATIC MANEUVERS ARE APPROVED:

Maneuver	<u>Ent</u>	ry Speed	Maneuver	Entr	ry Speed
Chandelles	120 m.p.h.	(104 knots)	Lazy Eights	120 m.p.h.	(104 knots)
Steep Turns	110 m.p.h.	(96 knots)	Spins	Slow decele	ration
Barrel Rolls	130 m.p.h.	(113 knots)	Aileron Rolls	130 m.p.h.	(113 knots)
Snap Rolls	90 m.p.h.	(78 knots)	Immelmans	145 m.p.h.	(126 knots)
Loops	130 m.p.h.	(113 knots)	Cuban Eights	145 m.p.h.	(126 knots)
Vertical			Stalls (except		
Reversements	90 m.p.h.	(78 knots)	Whip Stalls)	Slow decele	ration

# (4) Model F150L and F150M (1971 Model through 1975 Model):

"This airplane is approved in the utility category and must be operated in compliance with the operating limitations as stated in the form of placards, markings, and manuals.

#### MAXIMUMS

Maneuvering Speed		109 m.p.h. CAS	(95 knots)
Gross Weight		1600 lb.	
Flight Load Factor	Flaps Up	+4.4, -1.76	
	Flans Down	+3.5	

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Maneuver	Max. Entry Speed	Maneuver	Max. Entry Speed
Chandelles Lazy Eights	109 m.p.h. (95 knots) 109 m p h. (95 knots)	Spins Stalls (except	Slow Deceleration
Steep Turns	109 m.p.h. (95 knots)	whip stalls)	Slow Deceleration

Spin Recovery: opposite rudder - forward elevator - neutralize controls.

Intentional spins with flaps extended are prohibited.

Known icing conditions to be avoided.

This airplane is certified for the following flight operations as of date of original airworthiness certificate:

(DAY - NIGHT - VFR - IFR)" (As applicable)

# (5) Model FA150L, FRA150L and FRA150M(1971 Model through 1975 Model):

"This airplane is approved in the acrobatic category and must be operated in compliance with the operating limitations as stated in the form of placards, markings, and manuals.

# **MAXIMUMS**

Maneuvering speed 118 m.p.h. (CAS) (103 knots)
Gross Weight 1650 lb (FRA150L and M)

1600 lb (FA150L)

Flight load factor Flaps up +6.0, -3.0

Flaps down +3.5

Acrobatic maneuvers with flaps extended are prohibited.

Inverted flight is prohibited.

Child's seat and/or baggage compartment must not be occupied during acrobatics.

<u>Maneuver</u>	Recom. Entry Speed	<u>Maneuver</u>	Recom. Entry Speed
Chandelles	120 m.p.h. (104 knots)	Lazy Eights	120 m.p.h. (104 knots)
Steep Turns	110 m p h. (96 knots)	Spins	Slow Deceleration
Barrel Rolls	130 m.p.h. (113 knots)	Aileron Rolls	130 m.p.h. (113 knots)
Snap Rolls	90 m.p.h. (78 knots)	Immelmans	145 m.p.h. (126 knots)
Loops	130 m.p.h. (113 knots)	Cuban Eights	145 m.p.h. (126 knots)
Vertical		Stalls (except	
Reversements	90 m.p.h. (78 knots)	Whip Stalls)	Slow Deceleration

Spin Recovery: opposite rudder - forward elevator - neutralize controls.

Known icing conditions to be avoided.

This airplane is certified for the following flight operations as of date of original airworthiness certificate:

(DAY - NIGHT - VFR - IFR)" (As applicable)

## (6) Model F150M (1976 and 1977)

"This airplane is approved in the utility category and must be operated in compliance with the operating limitations as stated in the form of placards, markings, and manuals.

## **MAXIMUMS**

Maneuvering Speed	(IAS)	97 knots
Gross Weight		1600 lb.
Flight Load Factor	Flaps Up	+4.4 -1.76
	Flaps Down	+3.5

# NO ACROBATIC MANEUVERS APPROVED EXCEPT THOSE LISTED BELOW

<u>Maneuver</u>	Recom. Entry Speed	Maneuver	Recom. Entry speed
Chandelles	95 knots	Spins	Slow Deceleration
Lazy Eights	95 knots	Stalls(except	
Steep Turns	95 knots	whip Stalls)	Slow Deceleration

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Abrupt use of the controls prohibited above 97 knots.

Spin recovery: opposite rudder - forward elevator - neutralize controls.

Intentional spins with flaps extended are prohibited.

Flight into known icing condition prohibited.

This airplane is certified for the following flight operations as of date of original airworthiness certificate:

(DAY - NIGHT - VFR - IFR)" (As applicable)

# (7) Model FRA150M (1976 and 1977)

"This airplane is approved in the acrobatic category and must be operated in compliance with the operating limitations as stated in the form of placards, markings, and manuals.

# **MAXIMUMS**

Maneuvering Speed (IA	AS)	105 knots
Gross Weight		1650 lb.
Flight load factor	Flaps up	+6.0, -3.0
	Flaps down	+3.5

Acrobatic maneuver with flaps extended are prohibited.

Inverted flight is prohibited.

Baggage compartment and/or child's seat must not be occupied during acrobatics.

<u>Maneuver</u>	Recom. Entry Speed	<u>Maneuver</u>	Recom. Entry Speed
Chandelles	105 knots	Lazy Eights	105 knots
Steep Turns	100 knots	Spins	Slow Deceleration
Barrel Rolls	115 knots	Aileron Rolls	115 knots
Snap Rolls	80 knots	Immelmans	130 knots
Loops	115 knots	Cuban Eights	130 knots
Vertical		Stalls (except	
Reversements	80 knots	Whip Stalls)	Slow Deceleration

Abrupt use of the controls prohibited above 105 knots.

Spin recovery: opposite rudder - forward elevator - neutralize controls.

Flight into known icing condition prohibited.

This airplane is certified for the following flight operations as of date of original airworthiness certificate:

(DAY - NIGHT - VFR - IFR)" (As applicable)

# (8) Model F152 (1978 Model)

"This airplane is approved in the utility category and must be operated in compliance with the operating limitations as stated in the form of placards, markings and manuals.

## **MAXIMUMS**

Maneuvering Speed (IA	AS)	104 knots
Gross Weight		1670 lb.
Flight load factor	Flaps up	+4.4, -1.76
	Flans down	+3.5

## NO ACROBATIC MANEUVERS APPROVED EXCEPT THOSE LISTED BELOW

<u>Maneuver</u>	Recom. Entry Speed	<u>Maneuver</u>	Recom. Entry speed
Chandelles	95 knots	Spins	Slow Deceleration
Lazy Eights Steep Turns	95 knots 95 knots	Stalls(except whip Stalls)	Slow Deceleration
Steep ruins	) Kilots	winp stans)	Slow Deceleration

Abrupt use of the controls prohibited above 104 knots.

Intentional spins with flaps extended are prohibited.

Flight into known icing condition prohibited.

This airplane is certified for the following flight operations as of date of original airworthiness certificate:

(DAY - NIGHT - VFR - IFR)" (As applicable)

## (9) Model FA152 (1978 Model)

"This airplane is approved in the acrobatic category and must be operated in compliance with the operating limitations as stated in the form of placards, markings, and manuals.

## **MAXIMUMS**

Maneuvering Speed (IAS)		108 knots
Gross Weight		1670 lb.
Flight load factor	Flaps up	+6.0, -3.0
	Flaps down	+3.5

Acrobatic maneuver with flaps extended are prohibited.

Inverted flight is prohibited.

Baggage compartment and/or child's seat must not be occupied during acrobatics.

## THE FOLLOWING ACROBATIC MANEUVERS ARE APPROVED

<u>Maneuver</u>	Recom. Entry Speed	<u>Maneuver</u>	Recom. Entry Speed
Chandelles	105 knots	Lazy Eights	105 knots
Steep Turns	100 knots	Spins	Slow Deceleration
Barrel Rolls	115 knots	Aileron Rolls	115 knots
Snap Rolls	80 knots	Immelmans	130 knots
Loops	115 knots	Cuban Eights	130 knots
Vertical		Stalls (except	
Reversements	s 80 knots	Whip Stalls)	Slow Deceleration

Abrupt use of the controls prohibited above 108 knots.

Altitude loss in a stall recovery - 160 ft.

Flight into known icing condition prohibited.

This airplane is certified for the following flight operations as of date of original airworthiness certificate:

(DAY - NIGHT - VFR - IFR)" (As applicable)

B. In the baggage compartment: (F152, FA152) (1978 Model)

"120 lb. maximum baggage and/or auxiliary seat passenger. For additional loading instructions see Weight and Balance Data".

- C. On the instrument panel:
  - (1) Models F150K, FA150K

Models F150L, FA150L and FRA150L (1971)

"Don not turn off alternator in flight except in emergency".

- D. Near fuel shutoff valve:
  - (1) Model F150G through F150N, FA150K through FA150L, FRA150L and FRA150M (1977 Model):

"Fuel 22.5 gals. ON-OFF".

(2) Model F152 and FA152 (1978 Model)

"Fuel 24.5 gals. ON-OFF".

- E. On front door post:
  - (1) Model FA150K, FA150L, FRA150L, FRA150M, F152 and FA152: "Emergency door release
    - 1. Unlatch door
    - 2. Pull "D" ring".
- F. On door near window latch:
  - (1) Model FA150K, FA150L, FRA150L and FRA150M (1975 Model) "Do not open window above 165 m.p.h.."
  - (2) On FRA150M (1976 and 1977 Model), and FA152 (1978 Model) "Do not open window above 143 knots IAS".
- G. On the instrument panel near overvoltage light (Model F150L, F150M, FA150L, FRA150L, FRA150M, F152 (1978 Model) and FA152 (1978 Model):
  - (1) "High voltage".
- H. On left hand instrument panel:
  - (1) Model F152 and FA152 (1978 Model)

"Spin Recovery

- 1. Verify ailerons are neutral and throttle is closed.
- 2. Apply full opposite rudder.
- 3. Move control wheel briskly forward to break stall.
- 4. Neutralize rudder and recover from dive."
- I. Model F152 and FA152 (1979 Model and on)

All placards required in the pilot's operating handbook and FAA approved airplane flight manual must be installed in the appropriate locations.

NOTE 3

The marking of the airspeed indicator with I.A.S. provides an equivalent level of safety to CAR 3.757 when the approved airspeed calibration data presented in Section V of the Pilot's Operating Handbooks listed below is available to the pilot:

F150M	: Cessna P/N D1055-13	(1976 Model)
FRA150M	: Cessna P/N D1056-13	(1976 Model)
F150M	: Cessna P/N D1080-13	(1977 Model)
FRA150M	: Cessna P/N D1081-13	(1977 Model)
F152	: Cessna P/N D1107-13	(1978 Model)
FA152	: Cessna P/N D1108-13	(1978 Model)
F152	: Cessna P/N D1136-13 PH	(1979 Model)
FA152	: Cessna P/N D1137-13 PH	(1979 Model)
F152	: Cessna P/N D1170-13 PH	(1980 Model)
FA152	: Cessna P/N D1171-13 PH	(1980 Model)
F152	: Cessna P/N D1190-13 PH	(1981 Model)
FA152	: Cessna P/N D1191-13 PH	(1981 Model)
F152	: Cessna P/N D1210-13 PH	(1982 Model)
FA152	: Cessna P/N D1211-13 PH	(1982 Model)
F152	: Cessna P/N D1229-13 PH	(1983 Model)
FA152	: Cessna P/N D1230-13 PH	(1983 Model)
F152	: Cessna P/N D1249-13 PH	(1984 Model)
FA152	: Cessna P/N D1250-13 PH	(1984 Model)
F152	: Cessna P/N D1270-13 PH	(1985 Model)
FA152	: Cessna P/N D1271-13 PH	(1985 Model)

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NOTE 5 Near fuel tank filler:

A. F150 series through 1977 Model and FA150 series through 1977 Model:

"Fuel

80/87 min. grade aviation gasoline Cap. 13.0 U.S. Gal."

B. F152 and FA152 (1978 Model)

"Fuel

100LL/100 min. grade aviation gasoline

Cap. 13.0 U.S. Gal."

NOTE 6 14-volt electrical system

(F150 series through 1977 Model and FA150 series through 1977 Model)

28-volt electrical system

(F152 and FA152) (1978 Model and on)

In addition to the placards specified above, the prescribed operating limitations indicated by an asterisk (\*) under Sections I through IX of this data sheet must also be displayed by permanent markings.